

## WHAT IS CLAIMED IS:

1. A power semiconductor device comprising:

a resin case for covering and protecting an outer surface of the power semiconductor device, the resin case  
5 having a thin portion integrally projected outward therefrom;

an external connecting terminal portion of a main circuit terminal, which extends outward from the resin case, wherein the thin portion of the resin case is formed on a  
10 backside of the external connecting terminal portion; and

a polygonal nut for receiving a clamping bolt, the polygonal nut securely inserted in a nut insertion hole which is formed in the thin portion of the resin case, wherein the polygonal nut is engaged with an inner surface  
15 of the nut insertion hole,

wherein the inner surface of the nut insertion hole has a round-shaped notch concave portion formed at a position confronting to a corresponding corner portion of the polygonal nut so that the corner portion of the  
20 polygonal nut is not in contact with a resin case member.

2. The power semiconductor device according to claim 1, wherein a slot grooves are radially formed at both sides near the notch concave portion in the inner surface of the  
25 nut insertion hole, so that a torque buffer portion for

absorbing a clamping torque is formed in a shape of a projection integrally projected as a part of the resin case between the notch concave portion and the slot grooves at both sides thereof.

5

3. The power semiconductor device according to claim 1, wherein the round-shaped notch concave portion in the inner surface of the nut insertion hole is filled with an elastic member made of rubber.

10

4. The power semiconductor device according to claim 2, wherein the round-shaped notch concave portion in the inner surface of the nut insertion hole is filled with an elastic member made of rubber.

15